JC10 Rec'd PCT/PTO 15 FEB 2002

FORM PTO-1390
(REV. 9-2001)

U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY 'S DOCKET NUMBER
16673-6

U.S. APPLICATION NO. (If known, see 37 CFR 1.5
10/049696

INTERNATIONAL APPLICATION NO. PCT/IB00/01259	INTERNATIONAL FILING DATE 6 September 2000	PRIORITY DATE CLAIMED 10 September 1999

TITLE OF INVENTION METHOD AND SYSTEM FOR TRANSMITTING MESSAGES FOR DATABASE

APPLICANT(S) FOR DO/EO/US Olivier BRIQUE; Christophe NICOLAS; Marco SASSELLI

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   - a. ☒ is attached hereto (required only if not communicated by the International Bureau)
   - b. ☐ has been communicated by the International Bureau.
   - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   - a. ☒ is attached hereto.
   - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Aplication under PCT Article 19 (35 U.S.C. 371(c)(3))
   - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   - b. ☐ have been communicated by the International Bureau.
   - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Attached to the English language translation of the International Application

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☒ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☒ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: International Search Report

    International Preliminary Examination Report

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U.S. APPLICATION NO (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO	ATTORNEY'S DOCKET NUMBER
10/049696	PCT/IB00/01259	16673-6

	CALCULATIONS	PTO USE ONLY
21. ☒ The following fees are submitted: **BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):** Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO .... **$1040.00** International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .... **$890.00** International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO .... **$740.00** International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) .... **$710.00** International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) **$100.00**		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$ 890	
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	$	
Total claims	14 - 20 =	0	x **$18.00**	$ 0	
Independent claims	3 - 3 =	0	x **$84.00**	$ 0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ **$280.00**	$ 280	

TOTAL OF ABOVE CALCULATIONS =	$ 1,170	
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2. +	$	
SUBTOTAL =	$ 1,170	
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).	$	
TOTAL NATIONAL FEE =	$ 1,170	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +	$ 40	
TOTAL FEES ENCLOSED =	$ 1,210	
	Amount to be refunded:	$
	charged:	$

a. ☒ A check in the amount of $ 1,210 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. ______________ in the amount of $ ___________ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-3030 (but not issue fees). A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Clifford W. Browning
Woodard, Emhardt, Naughton, Moriarty & McNett
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, Indiana 46204-5137
browning@worldip.com

Clifford W. Browning
SIGNATURE

Clifford W. Browning
NAME

32,201
REGISTRATION NUMBER

FORM PTO-1390 (REV 9-2001) page 2 of 2

10/049696
JC11 Rec'd PCT/PTO 15 FEB 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:) BOX PCT
)
Olivier Brique et al.)
)
Corresponding to International Application No. PCT/IB00/01259)
)
Filed September 6, 2000)
)
METHOD AND SYSTEM FOR TRANSMITTING MESSAGES FOR DATABASE) February 15, 2002

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

As a Preliminary Amendment to the above-referenced Application, please enter the following amendments prior to computing the filing fees therefore.

IN THE CLAIMS :

Please amend claims 3, 4, 5, 9, 10, and 13 as follows:

Express Mail Label No. EL916999859US **Date of Deposit:** February 15, 2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Sheryl L Hutchings
Signature of person mailing paper or fee

We claim :

3. Transmission process according to claims 1 or 2, characterized in that these databases are integrated in Pay-TV reception subscriber's units and that the useful data comprise the reception rights of a subscriber.

4. Transmission process according to claim 1, characterized in that these updating messages comprise a set of control-blocks comprising data and controls, and which consists in carrying out comparison operations between the data and the contents of the database and determine an action which consists, either to update the database, carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

5. Transmission process according to claim 1, characterized in that the database is divided or is of the relational type RDB.

9. Transmission system of message according to claim 6, characterized in that these updating messages comprise control-blocks comprising data and of controls, said controls determining an action which consists, either to update the database, or to carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

10. Transmission system of message according to claim 6, characterized in that the database is divided or is of relational type RDB.

13. Language interpreter evolved for database according to claim 12, characterized in that the database is connected to a Pay-TV subscriber module and that the action consists in returning a message towards the subscriber module for carrying out an action in said subscriber module.

REMARKS

Attached hereto are pages 4-5 that present a marked up version of the changes made to the claims by this preliminary amendment. Page 4 is captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

By:
Clifford W. Browning
Reg. No. 32,201
Woodard, Emhardt, Naughton,
  Moriarty & McNett
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, Indiana 46204-5137
(317) 634-3456

#158550

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 3, 4, 5, 9, 10, and 13 have been amended as follows:

[CLAIMS]

We claim :

3. (Amended) Transmission process according to claims 1 [and]or 2, characterized in that these databases are integrated in Pay-TV reception subscriber's units and that the useful data comprise the reception rights of a subscriber.

4. (Amended) Transmission process according to claim[s] 1 [to 3], characterized in that these updating messages comprise a set of control-blocks comprising data and controls, and which consists in carrying out comparison operations between the data and the contents of the database and determine an action which consists, either to update the database, carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

5. (Amended) Transmission process according to claim[s] 1 [to 3], characterized in that the database is divided or is of the relational type RDB.

9. (Amended) Transmission system of message according to claim[s] 6 [to 8], characterized in that these updating messages comprise control-blocks comprising data and of controls, said controls determining an action which consists, either to update the database, or to carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

10. (Amended) Transmission system of message according to claim[s] 6 [to 9], characterized in that the database is divided or is of relational type RDB.

13. (Amended) [Improved] [l]Language interpreter evolved for database according to claim 12, characterized in that the database is connected to a Pay-TV subscriber module and that the action consists in returning a message towards the subscriber module for carrying out an action in said subscriber module.

MESSAGES TRANSMISSION PROCESS AND SYSTEM FOR DATA BASES

The present invention concerns a process and system of database updating, in particular for a database with unidirectional access.

In a system comprising a managing centre having a main database, and a plurality of subscribers each one having a subscriber's database over a wide territory, it is known to send data by phone or hertz route to update the database of these subscribers. These messages address, either to all the subscribers, or to a particular subscriber, that is to say, that they contain a subscribed module address.

As some systems of this type do not use return path towards the managing centre such as by modem for example, it is difficult to know if the sent data have arrived correctly. In this way, it is obliged to repeat these messages periodically in order to ensure that the message has arrived property at destination at least once.

One can easily imagine what the consequence is in a system managing a large number of subscribers, for example 2 to 3 million, the repetition of these messages being able to saturate rapidly the transmission capacity.

In a system of this type, the transmission channel is used more for transmission of useful data such as audio, video or data and managing data, for subscriber databases, and can occupy only a very limited bandwidth.

Such a system is described in the European patent EP 0 616 714, and treats the problem of the updating of a database defined in a smart card. The controls are of simple type and are all destined to enter data in this database. Even if this structure has an advantage on the previous solutions, that is to say based on a structure fixed by the supplier of the software, it do not permit the personalization or special processing.

Another example of the limits of the existing addressing is disclosed in EP 0 491 069. Each database includes a single identifier used to address this database. Thus, when a large number of databases must be updated, they must be addressed sequentially.

One realizes that one is rapidly limited if one wants to use more sophisticated functions, for example to offer one month of free subscription for a new channel to all the subscribers having subscribed for at least one year. In such a case, according to the present transmission technique, one determines on the main database in the managing centre, the list of subscribers answering this criterion, and one formats and then sends on the network a message to each chosen subscriber, a message containing the address of the addressee.

One must not forget that these messages must be repeated periodically to assure that each subscriber has the possibility to receive it.

At present, such functions are not easily possible because they can completely saturate the system with the transmission of managing messages. The specific addressing is therefore used for initialising a subscriber or to update the same, following a call to the management centre.

When one considers the subscriber databases according to the prior art, one can see that these databases contain only information allowing the access to transmissions broadcasted. Said information or data called "systems" such as the subscriber number, are memorized independently. It is based on these data-systems that one determines if a message is addressed to the considered database. No request inside of the database is made, the test using only the systems information.

The aim of the present invention is to propose a process, which allows the transmission of messages which address to a previously non-defined subscriber's group.

This aim is fully reached by a process of transmission of messages of updating database between a managing centre and a plurality of shared database, each database comprising data-systems and useful data. According to the process of the invention, these messages comprise data and controls which condition the updating of a database according to one or more data either present or not in the said database and representing the useful data.

By useful data, the data to which the database has been provided is meant, on the contrary to data-systems, which define the structure of the base and allow to define its address or identifier.

When starting the service of such a database, this does not contain in principle any useful data while all the data-systems are defined.

According to the invention, this process allows to carry out complex operations directly on the useful data of each subscriber's base in order to determine if such transmitted data is addressed to this database.

Within the aforementioned example, the data related to the access authorization to the new channel are conditioned to a request on the contents of the base, in particular the date of the subscription of the referred subscription. Thus, the operations carried out in the managing centre determine the subscribers benefiting from the promotional offer, are carried out in the same way on the level of the database of each subscriber.

Due to this process, a subscriber's group not defined in advance (for example 120'000 football fans) can take advantage of a new sports channel (for example for a test period) by sending a single control message on the network. Previously, it would have been necessary to send 120.000 control messages on the network, a control message for each beneficiary subscriber.

The requests carried out by this control language can be simple, for example the subscription date of a subscription submission, or complex, for example a selection operation on several criteria.

It is known in Pay-TV systems to offer the possibility to buy the shows such as recent films or the transmission of a football match. The user, owing to the function "pay-per-view" debits his account to the video access supplier for visualization of his favourite transmission.

The database memorizes the transmissions bought for statistical purposes (for example financial) or for further consultation by the subscriber. Due to the process according to the invention, it is possible to propose a reduction, for example of 50%, on the purchase of the next transmission of the same type. This offer is contained in

a message, which includes a complex request since it first extracts from the data of database relating to the transmissions bought previously, to carry out the necessary verifications and, according to the result of the verification, to enter in the base the information related to this new offer. All these operations are contained in a single message.

In order to express this kind of message, a new message format is proposed in the frame of this invention that allows the transmission of complex controls. One can easily imagine that the transmission of a control cannot easily contain the request such as described previously. This is why a message containing a set of control blocks is proposed, each control block processing a single request and, according to the result, being able to decide the following sequence.

According to this form of message construction, a control block includes a request on the database allowing the use of several data contained in the database, a data or comparison data and an action according to the result of these comparisons.

According to the comparison result, by action, either the stop of the processing of the message (stop function), or the processing of the subsequent control block (continuous function) or the execution of the X block (jump function) is meant.

It is possible, owing to this structure, to carry out complex functions developed in a single message.

The present invention concerns also a formatting system of managing messages, preferably in evolved language such as SQL, and a transmission system of messages comprising a managing centre with its main database and a plurality of subscriber units, each unit comprising a database, the managing centre transmitting messages comprising data and controls, these latter conditioning the updating of the database according to one or more criteria bound to the contents of the database. The system according to the invention transmits messages comprising requests which condition the updating of the database. This system uses the above described process.

This invention concerns also a language interpreter evolved for database designed to receive conditional updating messages, to carry out comparison operations on one

or more criteria contained in the database and to update the database according to the result of the comparison.

The subscriber's module includes schematically a data receiver, either audio, video or numerical, a decoder able to separate the data of managing messages, these latter being directed towards a security module comprising the subscriber's database. In an embodiment, this module is directly installed in the subscriber module or, for security and cost reasons, this module is under the form of a detachable smart card. The subscriber database, similarly to the interpreter is located on this smart card. The interpreter receives from the decoder the managing messages serving to define the different rights connected to the service or emission providers.

The interpreter according to prior art has the task of organization and updating of the database. It receives the updating controls and determines the location where to store this information. An example of such an interpreter is described in EP 0 616 714. The interpreter according to the invention, not only organizes the database, but carries out also the request operations on said base in order to verify the updating conditions, and, if the format of the message is of the multiple control-blocks type, carries out the condition attached to this comparison which by memory allows, either to terminate the carrying out of the message, or to proceed with the subsequent block or jump to a certain block.

This kind of interpreter can be used as segmented database-manager or as a relational-type base. By segmented type base, a base for which one creates a sector by supplier of service and where one stores the rights related to this supplier in this section, is meant. By relational database, a base in which the information or data are stored in a certain place, only the link allowing to find them being connected to the describer of the related supplier, is meant. One can see that this kind of interpreter is not attributable to the kind of base and can apply to any base-structure.

In a particular form of the invention, the requests defining the conditional updating base on the single number of subscribers, the number pertaining to a group, for example the postal code, or the subscribed subscription.

According to an aspect of the invention, all the parameters of said systems are stored in the database.

An advantage of this kind of message is to suppress the repeating effects. In fact, we have seen that the controls are sent several times to ensure that they have been properly received by the subscriber unit. In this case, according to the prior art, an updating will be carried out many times, unnecessary using the processing capacities of the database interpreter. To avoid this, it is sufficient to add a condition in order that the updating will be carried out if it has not still been made.

Another advantage of this invention is to be able to proceed to verifications of the subscriber database by sending messages having the task to carry out a certain number of operations on the data of this subscriber, and when the result differs to that expected, an action can be ordered.

In a particular embodiment of the invention, the result of the request can cause a notification of the security module towards the subscriber module, to carry out an action. By action is meant, for example, a notice of a message on the display, a ringing or more generally a sound signal, or even the formation of a phone call on a modem connected to the public phone network.

CLAIMS

1. Transmission process of messages of updating database between a managing centre and a plurality of shared databases, each database comprising data-systems and useful data, characterized in that these messages comprise data and controls which condition the updating of a database according to one or more useful data present or not in the said database.

2. Transmission process according to claim 1, characterized in that the connection between the managing centre and the databases is mainly unidirectional.

3. Transmission process according to claims 1 and 2, characterized in that these databases are integrated in Pay-TV reception subscriber's units and that the useful data comprise the reception rights of a subscriber.

4. Transmission process according to claims 1 to 3, characterized in that these updating messages comprise a set of control-blocks comprising data and controls, and which consists in carrying out comparison operations between the data and the contents of the database and determine an action which consists, either to update the database, carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

5. Transmission process according to claims 1 to 4, characterized in that the database is of segmented type or is of the relational type RDB.

6. Transmission system of message comprising a managing centre and a plurality of shared databases, each database comprising data-systems and useful data, characterized in that these messages comprise data and controls which condition the updating of a database according to one or more useful data either present or not in said database.

7. Transmission system of message according to claim 6, characterized in that the transmission between the managing centre and the databases is unidirectional.

8. Transmission system of message according to claim 6, characterized in that these databases are integrated in Pay-TV reception subscriber's units and that the useful data comprise the reception rights of a subscriber.

9. Transmission system of message according to claims 6 to 8, characterized in that these updating messages comprise control-blocks comprising data and controls, said controls determining an action which consists, either to update the database, or to carry out the subsequent control block, or to jump to another control block, or to terminate the processing of the message.

10. Transmission system of message according to claims 6 to 9, characterized in that the database is of segmented type or is of the relational type RDB.

11. Improved language interpreter for database processing a database in an environment using a managing centre and a plurality of shared subscriber's databases, each database comprising data-systems and useful data, this interpreter receiving updating messages, characterized in that it is designed to receive conditional updating messages, to carry out comparison operations on one or more useful data either present or not in the database and to update the database according to the result of these comparisons.

12. Improved language interpreter according to claim 11, characterized in that these updating messages comprise control blocks comprising data and controls, that carries out comparison operations between the data and the contents of the database and determines an action which consists, either to update the database, carry out the subsequent block or jump to another control block, or to terminate the processing of said message.

13. Improved language interpreter according to claim 12, characterized in that the database is connected to a Pay-TV subscriber module and that the action consists in returning a message towards the subscriber module for carrying out an action in said subscriber module.

ABSTRACT

For updating shared databases on a subscriber network, a managing centre sends messages addressed to each of these bases. When one requires to address a great number of databases, the time to accede to each of them increases considerably considered the necessity to repeat the information to ensure the good reception of messages. Instead of addressing by name each database, it is proposed to transmit criteria in which a certain number of databases recognize themselves and apply a selective updating on these bases.

P-14-315-US

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

Docket No. 16673-6

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

MESSAGES TRANSMISSION PROCESS AND SYSTEM FOR DATA BASES

the specification of which

(check one) ☐ is attached hereto.
☐ was filed on ______________ as Application Serial No. ____________
and was amended on ______________________ (if applicable).
☑ was filed as PCT International Application No. PCT/IB00/01259 and
was amended under PCT Article 19 on __________________ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at lease one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) on which priority is claimed:

Prior Foreign/PCT Application(s)			Priority Claimed	
1660/99	CH	10 September 1999	☑	☐
(Application No.)	(Country/PCT)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Prior U.S./PCT Applications:

(U.S. Application Serial No.)	(U.S. Filing Date)	(Status-patented/pending/abandoned)

(PCT Application No.)	(U.S. Filing Date)	(U.S. Serial No. Assigned, if any)	(Status-patented/pending/abandoned)

I hereby declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Harold R. Woodard, No. 16214; C. David Emhardt, No~~. 18,483;~~ Joseph A. Naughton Jr., No. 19,814; John V. Moriarty, No. 26,207; John C. McNett, No. 25,533; Thomas Q. Henry, No. ~~28,309;~~ James M. Durlacher, No. 28,840; Charles R. Reeves, No. 28,750; Vincent O. Wagner, No. 29,596; Steve Zlatos, No. 30,123; Spiro Bereveskos, No. ~~30,821;~~ William F. Bahret, No. 31,087; Clifford W. Browning, No. 32,201;; R. Randall Frisk, No. 32,221; Daniel J. Lueders, No. 32,581; Michael D. Beck, No. 32,722; and Kenneth A. Gandy, No. 33, 386.

Address all telephone calls to: Clifford W. Browning at (317) 634-3456
Address all correspondence to: Clifford W. Browning, Esq.
WOODARD, ~~EMHARDT, NAUGHTON,~~ MORIARTY & MCNETT
Bank One Center/Tower
111 Monument Circle, Suite 3700
Indianapolis, Indiana 46204-5137

Full name of sole or first inventor:
100
Olivier BRIQUE

Inventor's Signature: Date: January 24th 2002

Residence
Route de la Clochatte 5, 1052 Le Mont-sur-Lausanne

Country of Citizenship
Switzerland

Post Office Address
22, route de Genève, CH-1033 Cheseaux-sur-Lausanne

Full name of second joint inventor, if any:

Christophe NICOLAS

200

Inventor's Signature:

Date: January 24th 2002

Residence

Rue de Lausanne 59, 1028 Préverenges

Country of Citizenship

Switzerland

Post Office Address

22, route de Genève, CH-1033 Cheseaux-sur-Lausanne

Full name of third joint inventor, if any:

Marco SASSELLI

300

Inventor's Signature:

Date: January 24th 2002

Residence

20, chemin des Roches, CH-1803 Chardonne

Country of Citizenship

Switzerland

Post Office Address

22, route de Genève, CH-1033 Cheseaux-sur-Lausanne